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Lys Ser Arg Gln Cys Ile Phe Asp Arg Glu Leu His Arg Gln Thr Gly Page 16

35 40 45

Asn Gly Phe Arg Cys Leu Asn Cys Asn Asp Asn Thr Asp Gly Ile His 50 55 60

Cys Glu Lys Cys Lys Asn Gly Phe Tyr Arg His Arg Glu Arg Asp Arg 65 70 75 80

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Cys Asp Arg Cys Leu Pro Gly Phe His Met Leu Thr Asp Ala Gly Cys 115 120 125

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Val Thr Gly Glu Arg Cys Asp Arg Cys Arg Ser Gly Tyr Tyr Asn Leu 165 170 175

Asp Gly Gly Asn Pro Glu Gly Cys Thr Gln Cys Phe Cys Tyr Gly His 180 185 190

Ser Ala Ser Cys Arg Ser Ser Ala Glu Tyr Ser Val His Lys Ile Thr 195 200 205

Ser Thr Phe His Gln Asp Val Asp Gly Trp Lys Ala Val Gln Arg Asn 210 215 220

Gly Ser Pro Ala Lys Leu Gln Trp Ser Gln Arg His Gln Asp Val Phe 225 230 235 240

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Phe Leu Gly Asn Gln Gln Val Ser Tyr Gly Gln Ser Leu Ser Phe Asp 260 265 270

Tyr Arg Val Asp Arg Gly Gly Arg His Pro Ser Ala His Asp Val Ile 275 280 285

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Lys Thr Leu Pro Cys Gly Leu Thr Lys Thr Tyr Thr Phe Arg Leu Asn 305 310 315

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Gly Glu Tyr Ser Thr Gly Tyr Ile Asp Asn Val Thr Leu Ile Ser Ala 355 360 365

Arg Pro Val Ser Gly Ala Pro Ala Pro Trp Val Glu Gln Cys Ile Cys 370 375 380

Pro Val Gly Tyr Lys Gly Gln Phe Cys Gln Asp Cys Ala Ser Gly Tyr 385 390 395 400

Lys Arg Asp Ser Ala Arg Leu Gly Pro Phe Gly Thr Cys Ile Pro Cys 405 410 415

Asn Cys Gln Gly Gly Gly Ala Cys Asp Pro Asp Thr Gly Asp Cys Tyr 420 425 430

Ser Gly Asp Glu Asn Pro Asp Ile Glu Cys Ala Asp Cys Pro Ile Gly 435 440 445

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His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu Glu Val Val 465 470 475 480

Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys 485 490 495

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Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn Cys Asn Page 18

565 570 575

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Cys Lys Pro Gly Phe Gly Gly Pro Asn Cys Glu His Gly Ala Phe Ser 595 600 605

Cys Pro Ala Cys Tyr Asn Gln Val Lys Ile Gln Met Asp Gln Phe Met 610 620

Gln Gln Leu Gln Arg Met Glu Ala Leu Ile Ser Lys Ala Gln Gly Gly 625 630 635 640

Asp Gly Val Val Pro Asp Thr Glu Leu Glu Gly Arg Met Gln Gln Ala 645 650 655

Glu Gln Ala Leu Gln Asp Ile Leu Arg Asp Ala Gln Ile Ser Glu Gly 660 665 670

Ala Ser Arg Ser Leu Gly Leu Gln Leu Ala Lys Val Arg Ser Gln Glu 675 680 685

Asn Ser Tyr Gln Ser Arg Leu Asp Asp Leu Lys Met Thr Val Glu Arg 690 695 700

Val Arg Ala Leu Gly Ser Gln Tyr Gln Asn Arg Val Arg Asp Thr His 705 710 715 720

Arg Leu Ile Thr Gln Met Gln Leu Ser Leu Ala Glu Ser Glu Ala Ser 725 730 735

Leu Gly Asn Thr Asn Ile Pro Ala Ser Asp His Tyr Val Gly Pro Asn 740 745 750

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Tyr Ser Lys Gln Ala Leu Ser Leu Val Arg Lys Ala Leu His Glu Gly 785 790 795 800

Val Gly Ser Gly Ser Gly Ser Pro Asp Gly Ala Val Gln Gly Leu 805 810 815

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Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 130 135 140

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Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys 180 185 190

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Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp 50 55 60

Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 65 70 75 80

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Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile His Asn Thr Ala $\bar{1}\bar{0}\bar{0}$ 105 110

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Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn Cys Asn Pro Met 130 135

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Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn

Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile His Asn Thr Ala

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Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp

Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 65 70 75 80

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn 85 90 95

Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile His Asn Thr Ala 100 105 110

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Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp 50 55 60

Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 70 75 80

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn 85 90 95

Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile His Asn Thr Ala 100 105 110

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Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp 50 55 60

Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 70 75 80

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn 85 90 95

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Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 70 75 80

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn 85 90 95

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Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu Glu Val Val Cys Asn 35 40 45

Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp 50 55 60

Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys 70 75 80

Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn 85 90 95

Cys Asp Arg Leu 100

<210> 13

<211> 141

<212> PRT

<213> Homo sapiens

<400> 13

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu
1 5 10 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys 20 25 30

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro

Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys 75

Ile His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr

Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys

Asn Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly

Thr Cys Val Cys Lys Pro Gly Phe Gly Gly Pro Asn Cys 135

<210> 14

<211> 141 <212> PRT

<213> Homo sapiens

<400> 14

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro

Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys

Ile His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr

Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys

Asn Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly Page 27

120

125

Thr Cys Val Cys Lys Pro Gly Phe Gly Gly Pro Asn Cys 130 135 140

<210> 15

<211> 129

<212> PRT

<213> Homo sapiens

<400> 15

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu 1 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys 20 25 30

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly 35 40 45

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 50 60

Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys 65 70 75 80

Ile His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr 85 90 95

Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys 100 105 110

Asn Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly 115 120 125

Thr

<210> 16

<211> 111

<212> PRT

<213> Homo sapiens

<400> 16

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu 1 5 10 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys 20 25 30

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Page 28

35 40 45

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 50 55 60

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Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys 65 70 75 80

Ile His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr 85 90 95

Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala 100 105 110

<210> 17

<211> 106

<212> PRT

<213> Homo sapiens

<400> 17

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu 1 5 10 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys 20 25 30

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly 35 40 45

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 50 55 60

Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys 65 70 75 80

Ile His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr 85 90 95

Phe Gly Asp Pro Leu Ala Pro Asn Pro Ala 100 105

<210> 18

<211> 89

<212> PRT

<213> Homo sapiens

<400> 18

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu

5 10 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Page 29

20

25

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly
35 40 45

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 50 55 60

Ser Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys 65 70 75 80

Ile His Asn Thr Ala Gly Ile Tyr Cys
85

<210> 19

<211> 73

<212> PRT

<213> Homo sapiens

<400> 19

Cys Pro Cys His Asn Gly Phe Ser Cys Ser Val Ile Pro Glu Thr Glu 1 5 10 15

Glu Val Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys 20 25 30

Glu Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly 35 40 45

Pro Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro 50 55 60

Ser Ala Ser Gly Asn Cys Asp Arg Leu 65 70

<210> 20

<211> 114

<212> PRT

<213> Homo sapiens

<400> 20

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro
1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile 35 40 45

His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe Page 30

55

60

Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn 65 70 75 80

Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly Thr 85 90 95

Cys Val Cys Lys Pro Gly Phe Gly Gly Pro Asn Cys Glu His Gly Ala 100 105 110

Phe Ser

<210> 21

<211> 108

<212> PRT

<213> Homo sapiens

<400> 21

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro
1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile 35 40 45

His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe 50 60

Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn 65 70 75 80

Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly Thr 85 90 95

Cys Val Cys Lys Pro Gly Phe Gly Gly Pro Asn Cys

<210> 22

<211> 96

<212> PRT

<213> Homo sapiens

<400> 22

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro 1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser Page 31

25

30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe 50 60

Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn 65 70 75 80

Cys Asn Pro Met Gly Ser Glu Pro Val Gly Cys Arg Ser Asp Gly Thr 85 90 95

<210> 23

<211> 78

<212> PRT

<213> Homo sapiens

<400> 23

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro 1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile 35 40 45

His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe 50 55 60

Gly Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala 65 70 75

<210> 24

<211> 73

<212> PRT

<213> Homo sapiens

<400> 24

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro 1 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile 35 40 45

His Asn Thr Ala Gly Ile Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe Page 32

55

60

Gly Asp Pro Leu Ala Pro Asn Pro Ala 65 70

<210> 25

<211> 56

<212> PRT

<213> Homo sapiens

<400> 25

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro 1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu Thr Gly Arg Cys Leu Lys Cys Ile 35 40 45

His Asn Thr Ala Gly Ile Tyr Cys 50 55

<210> 26

<211> 40

<212> PRT

<213> Homo sapiens

<400> 26

Leu Cys Ala Asp Gly Tyr Phe Gly Asp Pro Phe Gly Glu His Gly Pro
1 5 10 15

Val Arg Pro Cys Gln Pro Cys Gln Cys Asn Ser Asn Val Asp Pro Ser 20 25 30

Ala Ser Gly Asn Cys Asp Arg Leu 35 40

<210> 27

<211> 177

<212> PRT

<213> Homo sapiens

<400> 27

Gln Phe Cys Gln Asp Cys Ala Ser Gly Tyr Lys Arg Asp Ser Ala Arg 1 5 10 15

Leu Gly Pro Phe Gly Thr Cys Ile Pro Cys Asn Cys Gln Gly Gly Gly 20 25 30

Ala Cys Asp Pro Asp Thr Gly Asp Cys Tyr Ser Gly Asp Glu Asn Pro 35 40 45

Asp Ile Glu Cys Ala Asp Cys Pro Ile Gly Phe Tyr Asn Asp Pro His 50 55 60

Asp Pro Arg Ser Cys Lys Pro Cys Pro Cys His Asn Gly Phe Ser Cys 65 70 75 80

Ser Val Ile Pro Glu Thr Glu Glu Val Val Cys Asn Asn Cys Pro Pro 85 90 95

Gly Val Thr Gly Ala Arg Cys Glu Leu Cys Ala Asp Gly Tyr Phe Gly 100 105 110

Asp Pro Phe Gly Glu His Gly Pro Val Arg Pro Cys Gln Pro Cys Gln 115 120 125

Cys Asn Ser Asn Val Asp Pro Ser Ala Ser Gly Asn Cys Asp Arg Leu 130 135 140

Thr Gly Arg Cys Leu Lys Cys Ile His Asn Thr Ala Gly Ile Tyr Cys 145 150 155 160

Asp Gln Cys Lys Ala Gly Tyr Phe Gly Asp Pro Leu Ala Pro Asn Pro 165 170 175

Ala